

CLAIM AMENDMENTS

1-7 (cancelled)

8. (previously presented) An arrangement in the fuel injection system for controlling the fuel injection, the arrangement comprising a body part having a space arranged therein, through which space the fuel to be injected during operation flows, and a fuel inlet opening and an outlet opening opening into the space, additionally the arrangement further comprises a piston means arranged movably inside the space, the piston means having a channel or the like arranged therein for creating a flow connection between the fuel inlet opening and the outlet opening, whereby in the arrangement the piston means can divide the space into a first part being in connection with the inlet opening and a second part being in connection with the outlet opening, the arrangement further comprising a spring or the like for creating a force acting on the piston means in a direction opposite to the main direction of the fuel flow, wherein in the arrangement the piston means and the body part delimit at least one third part as the piston means is in the end adjacent the inlet opening or near it, the volume of the third part being dependent on the mutual positions of the piston means and the body part.

9. (previously presented) An arrangement according to claim 8, wherein the piston means and the space are cylindrically formed and together they form at least two separate sliding surfaces formed at different distances from the central axis of the piston means and the space.

10. (previously presented) An arrangement according to claim 8, wherein when the piston means is in the end adjacent the inlet opening the volume of the third part is at its smallest and as the piston means retracts a certain distance away from the end adjacent the inlet opening the volume of the third part increases and that as the piston means retracts beyond the certain distance, the third part and the first part of the space are combined.

11. (previously presented) An arrangement according to claim 8, wherein the third part of the space is in continuous flow connection with the fuel inlet opening and/or the first part of the space.

12. (currently amended) An arrangement according to ~~claim 10~~
claim 11, wherein the flow connection is achieved by means of a
throttling channel or the like.

13. (previously presented) An arrangement according to claim 8,
wherein the space is cylindrical and it comprises at least two
portions having different diameters, with the portion having the
smaller diameter being in the end adjacent the inlet opening and that
the piston means correspondingly comprising two portions having
different diameters, with the portion having the smaller diameter
being in the end adjacent the inlet opening and that both the
longitudinal length of the portion of the piston means having the
smaller diameter and the longitudinal length of the of the portion of
the space having the smaller diameter are shorter than the length of
the stroke of the piston means.

14. (previously presented) An arrangement according to claim 8,
wherein when the piston means is in the end adjacent the outlet
opening the piston means joins the body part so that they together
close the flow connection of fuel to the inlet opening.

15. (new) A fuel injection control valve comprising:

a body part defining an interior space having an inlet end and an
outlet end and through which fuel to be injected during operation of
the control valve flows, and also defining a fuel inlet opening and a
fuel outlet opening that open into the interior space at the inlet and
outlet ends respectively of the interior space,

a piston arranged movably in the interior space and dividing the
interior space into a first part that is in communication with the
fuel inlet opening and a second part that is in communication with the
fuel outlet opening, the piston being formed with a passage for
providing a flow connection between the fuel inlet opening and the
fuel outlet opening, and

a resilient member urging the piston in a direction opposite to
the main direction of the fuel flow,

and wherein when the piston is at or near the inlet end of the
interior space, the piston and the body part bound a third part of the
interior space, said third part of the interior space being in

throttled communication with the second part for controlling equalization of pressure between the second and third parts.

16. (new) A fuel injection control valve according to claim 15, wherein the piston and the interior space are substantially circular in cross section and have a common central axis, and when the piston is at or near the inlet end of the interior space, the piston and the body part have at least two surfaces in sliding contact at different respective radial distances from the common central axis of the piston and the interior space.

17. (new) A fuel injection control valve according to claim 15, wherein the volume of the third part of the interior space is dependent on the position of the piston relative to the body part, and when the piston is at the inlet end of the interior space the volume of the third part of the interior space is at a minimum and as the piston moves away from the inlet end the volume of the third part increases.

18. (new) A fuel injection control valve according to claim 15, wherein when the piston moves away from the inlet end the volume of the third part increases until the piston reaches a predetermined distance away from the inlet end, and when the piston means moves beyond said predetermined distance, the third part and the first part of the interior space are combined.

19. (new) A fuel injection control valve according to claim 15, wherein the third part of the interior space is in flow connection with the fuel inlet opening and/or the first part of the interior space.

20. (new) A fuel injection control valve according to claim 19, wherein the third part of the interior space is in throttled communication with the first part of the interior space.

21. (new) A fuel injection control valve according to claim 15, wherein the interior space is substantially circular in cross section and comprises a smaller diameter portion and a larger diameter

portion, the smaller diameter portion of the interior space is between the larger diameter portion and the inlet end, the piston correspondingly comprising a smaller diameter portion and a larger diameter portion, and both the longitudinal length of the smaller diameter portion of the piston and the longitudinal length of the smaller diameter portion of the interior space are shorter than the length of the stroke of the piston means.

22. (new) A fuel injection control valve according to claim 15, wherein when the piston is at the end adjacent the outlet opening, the piston engages the body part so that they together prevent flow of fuel from the inlet opening to the outlet opening.

23. (new) A fuel injection control valve according to claim 15, wherein the interior space is substantially circular in cross section and comprises a smaller diameter portion and a larger diameter portion, the smaller diameter portion of the interior space is between the larger diameter portion and the inlet end, the piston correspondingly comprising a smaller diameter portion and a larger diameter portion, and when the piston is at or near the inlet end of the interior space the smaller diameter portion of the piston is in sliding contact with the body part bounding the smaller diameter portion of the interior space and the larger diameter portion of the piston is in sliding contact with the body part bounding the larger diameter portion of the interior space.